REVIEWS OF BOOKS

EVOLUTION

Darwin, Charles *and* **Wallace, Alfred Russel.** *Evolution by Natural Selection: A Centenary Commemorative Volume.* With a Foreword by Sir Gavin de Beer. Cambridge, 1958. Published for the XV International Congress of Zoology and the Linnean Society of London at the University Press. Pp. viii +288. Price 25s.

IT IS RARE for a publisher's blurb to be so accurate and sufficient that further review is scarcely needed here, beyond remarking upon the convenience of having the original papers now so happily available.

On July 1st, 1858 Charles Darwin and Alfred Russel Wallace made the first public statement of their theory of evolution by natural selection. This volume is published to mark the centenary.

The idea of the mutability of species and the principle of natural selection occurred independently to Darwin and Wallace. Darwin first recorded his argument in a *Sketch* in 1842, and wrote a more finished *Essay* in 1844. These two pieces, reprinted here, give valuable information on the way in which Darwin was led to his conclusions. The *Essay* is shorter, simpler and more direct than *The Origin of Species* (1859) and deserves to be as well known. Wallace reached similar conclusions fourteen years after Darwin, but before Darwin had published his own results. The two scientists presented the theory in a joint publication, communicated in 1858 to the *Journal of the Linnean Society*, and this little-read paper is also reprinted in this volume.

Sir Gavin de Beer's Foreword is a valuable study in the history of science. He traces the evolution of theories of evolution, from Darwin's predecessors to the present day, and shows the position that natural selection occupies in modern science.

It is pleasant too to be able to draw attention to the number of Fellows of our *Society*, both past and present, within the select company of those mentioned in Sir Gavin's Foreword as being prominent in the development of evolutionary theory in this century.

It is also apposite to quote here just two and a half sentences of Darwin's Autobiography:—

> In October 1838, that is, fifteen months after I had begun my systematic inquiry, I happened to read for amusement *Malthus on Population*, and being well prepared to appreciate the struggle for existence which everywhere goes on from long-continued observation of the habits of animals and plants, it at once struck me that under these circumstances favourable variations would tend to be preserved, and unfavourable ones to be destroyed. The result of this would be the formation of new species. Here then I had at last got a theory by which to work . . .

G. C. L. B.

HEREDITY

Kalmus, H. *Variation and Heredity.* London, 1958. Routledge and Kegan Paul. Pp. xi + 227. Price 28s.

DR. KALMUS GIVES A CLEAR and accurate account of the basic facts of human variation and heredity. His book should prove valuable to doctors and to all those interested in the general problem of human variation. Eugenists will be disappointed by Dr. Kalmus's gloomy and sceptical interpretation of the influence of genetic knowledge on human betterment. He shows how difficult it is safely to alter the genetic constitution of a human population. He regards eugenic advice to individual parents as having value only rarely. The general import of his thesis is that our knowledge of human genetics is slight and that what facts we have suggest that eugenics has little positive to offer.

Dr. Kalmus explicitly disavows any involvement in the sterile controversy of "nature versus nurture", but the implications of many of his conclusions favour environmentalist theories. In the matter of genius, for example, Kalmus believes that "a genius owes as much to his teacher or his books as to his parents". The music of Bach and the discoveries of Newton